

Appln No. 09/826,202
Amdt. Dated February 17, 2005
Reply to Office Communication of 01/25/05
Docket No. 14XZ101/GEM-0085

Amendments to the Claims:

The listing of claims will replace all prior versions, and listing, of claims in the application.

Listing of Claims:

1 (currently amended): A method for compensating an emission spectrum comprising:

providing a source of light ~~radiation~~ having an emission spectrum, the source responsive to incident radiation, the source having a first part of the emission spectrum that is independent of the temperature of the source and a second part of the emission spectrum that is dependent on the temperature of the source;

providing a detector ~~which~~ that is sensitive to the emission spectrum;

providing a filter between the source and the detector, the filter having a cutoff frequency such that the first part of the emission spectrum is transmitted and the second part of the emission spectrum is intercepted.

2 (currently amended): A device for compensating an emission spectrum comprising:

means for emission of light ~~radiation~~ having a spectrum, the means for emission responsive to incident radiation, the means for emission having a first part of the emission spectrum that is independent of the temperature of the ~~source~~ means for emission and a second part of the emission spectrum that is dependent on the temperature of the ~~source~~ means for emission;

means for detecting which is sensitive to the emission spectrum; and

means for filtering the light ~~radiation~~ disposed intermediate the means for emission and the means for detecting, the means for filtering transmitting the a first part of the ~~emission~~ light spectrum and the second part of the light ~~emission~~ spectrum is intercepted.

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3 (previously presented): The device according to claim 2 wherein the device is integrated with an intensifier.

4 (currently amended): The device according to claim 2 wherein the means for filtering is disposed below a light radiation intensifier on a radiation path.

5 (previously presented): The device according to claim 4 wherein the means for filtering is mounted in contact with the intensifier.

6 (previously presented): The device according to claim 3 wherein the means for filtering is one or more layers of a material to filter the part of the radiation that is intercepted.

7 (previously presented): The device according to claim 4 wherein the means for filtering is mounted in contact with the intensifier.

8 (currently amended): A radiological imaging cassette comprising:
means for emission of light radiation having an emission spectrum, the means for emission responsive to incident radiation, the means for emission having a first part of the emission spectrum that is independent of the temperature of the means for emission and a second part of the emission spectrum that is dependent on the temperature of the means for emission;

means for detecting which is sensitive to the emission spectrum; and

means for filtering the light radiation disposed intermediate the means for emission and the means for detecting, the means for filtering permitting the first part of the spectrum of the light radiation emitted is to be transmitted, and the second part of the light radiation spectrum to be intercepted.

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9 (previously presented): The cassette according to claim 8 wherein the cassette is integrated with an intensifier.

10 (currently amended): The cassette according to claim 8 wherein the cassette contains means for filtering disposed below a light radiation intensifier on a radiation path.

11 (previously presented): The cassette according to claim 10 wherein the means for filtering is mounted in contact with the intensifier.

12 (previously presented): The cassette according to claim 8 wherein the cassette contains an analog film.

13 (previously presented): The cassette according to claim 8 wherein the cassette contains a digital light detector.

14 (currently amended): A measuring module containing a device comprising:

means for emission of light radiation having an emission spectrum, the means for emission responsive to incident radiation, the means for emission having a first part of the emission spectrum that is independent of the temperature of the means for emission and a second part of the emission spectrum that is dependent on the temperature of the means for emission;

means for detecting which is sensitive to the emission spectrum; and

means for filtering the light radiation disposed intermediate the means for emission and the means for detecting, the means for filtering transmitting the first part of the emission light spectrum, and the second part of the light emission spectrum is intercepted.

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15 (previously presented): The module according to claim 14 wherein the module is integrated with an intensifier.

16 (currently amended): The module according to claim 14 wherein the module contains means for filtering disposed below a light radiation intensifier on a light radiation path.

17 (previously presented): The module according to claim 16 wherein the means for filtering is mounted in contact with the intensifier.

18 (previously presented): The module according to claim 14 wherein the module contains a photomultiplier tube, the device being mounted above the photomultiplier tube.

19 (currently amended): The module according to claim 14 wherein the module contains a light radiation intensifier.

20 (currently amended): The module according to claim 18 wherein the module contains a light radiation intensifier.

21 (currently amended): The module according to claim 14 comprising means for guiding the light radiation emanating from the means for emission.

22 (currently amended): A radiology apparatus comprising:
means for emission of light radiation having an emission spectrum, the means for emission responsive to incident radiation, the means for emission having a first part of the emission spectrum that is independent of the temperature of the means for emission and a second part of the emission spectrum that is dependent on the temperature of the means for emission;

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means for detecting which is sensitive to the emission spectrum; and
means for filtering the light radiation disposed intermediate the means for emission and the means for detecting, wherein the first part of the spectrum of the radiation emitted is transmitted and the second part of the radiation spectrum is intercepted.

23 (previously presented): The radiology apparatus according to claim 22 wherein the means for detecting contains an analog film.

24 (previously presented): The radiology apparatus according to claim 22 wherein the means for detecting contains a digital radiation detector.

25 (currently amended): A radiology apparatus comprising:
means for emission of light radiation having an emission spectrum, the means for emission responsive to incident radiation, the means for emission having a first part of the emission spectrum that is independent of the temperature of the means for emission and a second part of the emission spectrum that is dependent on the temperature of the means for emission;

means for detecting which is sensitive to the emission spectrum; and
a module containing a device comprising means for filtering the light radiation disposed intermediate the means for emission and the means for detecting, wherein the first part of the spectrum of the radiation emitted is intercepted and the second part of the spectrum is intercepted.

26 (original): The radiology apparatus according to claim 25 wherein the device is integrated with an intensifier.

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27 (currently amended): The radiology apparatus according to claim 25 wherein the device containing the means for filtering is disposed below a ~~light~~ radiation intensifier on a radiation path.

28 (previously presented): The radiology apparatus according to claim 25 wherein the device containing the means for filtering is mounted in contact with the intensifier.

29 (currently amended): A method for radiation output comprising:
providing an intensifier having an ~~emission~~ a light spectrum in response to incident radiation;
providing a detector, which has a sensitivity to the emission spectrum;
determining a wavelength of the emission spectrum that is independent of the temperature of the intensifier and another wavelength of the emission spectrum that is dependent of temperature of the intensifier;
providing a filter between the intensifier and the detector, the filter having a transmission spectrum that suppresses the wavelength that is dependent of the temperature of the intensifier.

30 (currently amended): An article of manufacture comprising:
means for intensifying having an ~~emission~~ light spectrum in response to incident radiation, the emission spectrum having a wavelength that is temperature sensitive;
means for detecting that has a sensitivity to the emission spectrum; and
means for filtering having a transmission spectrum that suppresses the wavelength that the means for intensifying is temperature sensitive.

31 (previously presented): The article according to claim 30 wherein the emission spectrum of the means for intensifying has a selected wavelength that is suppressed by the means for filtering.

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32 (previously presented): The article according to claim 30 wherein the emission spectrum of the means for intensifying has a principle peak centered at around 545 nm.

33 (previously presented): The article according to claim 30 wherein the means for filtering and the means for intensifying are integrated.

34 (previously presented): The article according to claim 30 wherein the means for filtering suppresses the wavelength shorter than a principle peak of the emission spectrum of the means for intensifying.

35 (previously presented): The article according to claim 30 wherein the means for filtering comprises material from the group consisting essentially of glass, polycarbonate or acetate, the material having a dye or organic or mineral pigment incorporated therein.

36 (previously presented): The article according to claim 30 wherein the means for filtering is a plurality of layers.

37 (previously presented): The article according to claim 30 wherein the means for detecting is a film.

38 (previously presented): The article according to claim 30 wherein the means for detecting is a photomultiplier tube.

39 (previously presented): The article according to claim 30 wherein the means for detecting is a charge transfer cell.

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40 (currently amended) The article according to claim 30 wherein the means mean for filtering is adapted to transmits radiation close to a principle peak of the emission spectrum of the means for intensifying and to intercepts radiation of wavelength corresponding to those of a secondary emission peak of a wavelength less than those of the principle emission peak.

41 (previously presented): The article according to claim 30 wherein the means for intensifying comprises a base of gadolinium oxysulfite terbium.

42 (currently amended): An article of manufacture comprising:
means for intensifying having ~~an emission~~ a light spectrum in response to incident radiation, the means for intensifying having an emission spectrum with a wavelength that is temperature sensitive;
means for detecting that has a sensitivity to the emission spectrum; and
means for filtering having a transmission spectrum that suppresses the wavelength that the means for intensifying is temperature sensitive;
the means for filtering suppressing the wavelength shorter than a principle peak of the emission spectrum of the means for intensifying; and
the means for filtering being disposed between the means for intensifying and the means for detecting.

43 (currently amended): A radiology apparatus comprising:
a source of emitted radiation;
a cassette for receiving the emitted radiation, the cassette comprising:
means for intensifying having ~~an emission~~ a light spectrum in response to the emitted radiation, the ~~emission~~ light spectrum having a wavelength at which the means for intensifying is temperature dependent;
means for detecting that has a sensitivity to the ~~emission~~ light spectrum; and

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means for filtering having a transmission spectrum that suppresses the wavelength that the means for intensifying is temperature dependent;

the means for filtering suppressing the wavelength shorter than a principle peak of the ~~emission~~- light spectrum of the means for intensifying; and

the means for filtering being disposed between the means for intensifying and the means for detecting.

44 (currently amended): A radiation dose measuring module comprising:

means for intensifying having ~~an emission~~ a light spectrum in response to incident radiation, the emission spectrum having a wavelength at which the means for intensifying is temperature dependent;

means for detecting that has a sensitivity to the ~~emission~~ light spectrum; and

means for filtering having a transmission spectrum that suppresses the wavelength that the means for intensifying is temperature dependent;

the means for filtering suppressing the wavelength shorter than a principle peak of the ~~emission~~ light spectrum of the means for intensifying;

the means for filtering being disposed between the means for intensifying and the means for detecting; and

a frame supporting the means for intensifying, the means for detecting and the means for filtering,

the frame forming a guide for the radiation of the ~~emission~~ light spectrum of the means for intensifying.

45 (currently amended): A method for radiation output comprising:

providing an intensifier having ~~an~~ a light emission spectrum in response to incident radiation;

providing a detector, which has a sensitivity to the emission spectrum;

determining a wavelength of the emission spectrum at which the intensifier is temperature dependent; and

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providing a filter between the intensifier and the detector, the filter having a transmission spectrum that suppresses the wavelength that the intensifier is temperature dependent.

46 (currently amended): An article of manufacture comprising:
means for intensifying having ~~an~~ a light emission spectrum in response to incident radiation;
means for detecting that has a sensitivity to the emission spectrum; and
means for filtering having a transmission spectrum that suppresses a wavelength of the emission spectrum at which ~~that~~ the means for intensifying is temperature dependent.

47 (previously presented):: The article according to claim 46 wherein the emission spectrum of the means for intensifying has a selected wavelength that is suppressed by the means for filtering.

48 (previously presented): The article according to claim 46 wherein the emission spectrum of the means for intensifying has a principle peak centered at around 545 nm.

49 (previously presented): The article according to claim 46 wherein the means for filtering and the means for intensifying are integrated.

50 (previously presented): The article according to claim 46 wherein the means for filtering suppresses the wavelength shorter than a principle peak of the emission spectrum of the means for intensifying.

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51 (previously presented): The article according to claim 46 wherein the means for filtering comprises material from the group consisting of glass, polycarbonate or acetate, the material having a dye or organic or mineral pigment incorporated therein.

52 (previously presented): The article according to claim 46 wherein the means for filtering is a plurality of layers.

53 (previously presented): The article according to claim 46 wherein the means for detecting is a film.

54 (previously presented): The article according to claim 46 wherein the means for detecting is a photomultiplier tube.

55 (previously presented): The article according to claim 46 wherein the means for detecting is a charge transfer cell.

56 (currently amended): The article according to claim 46 wherein the means for filtering transmits radiation close to a principle peak of the emission spectrum of the means for intensifying and intercepts radiation of wavelength corresponding to those of a secondary emission peak of wavelength less than those of the principle emission peak.

57 (previously presented): The article according to claim 46 wherein the means for intensifying comprises a base of gadolinium oxysulfite terbium.

58 (currently amended): An article of manufacture comprising:
means for intensifying having an a light emission spectrum in response to incident radiation, the means for intensifying having a wavelength that is temperature dependent;
means for detecting that has a sensitivity to the emission spectrum; and

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means for filtering having a transmission spectrum that suppresses the wavelength of the emission spectrum that the means for intensifying is temperature dependent;

the means for filtering suppressing the wavelength shorter than a principle peak of the emission spectrum of the means for intensifying; and

the means for filtering being disposed between the means for intensifying and the means for detecting.

59 (currently amended): A radiology apparatus comprising:

a source of emitted radiation;

a cassette for receiving the emitted radiation, the cassette comprising:

means for intensifying having ~~an~~ a light emission spectrum in response to the emitted radiation, the means for intensifying emitting a wavelength that is temperature sensitive;

means for detecting that has a sensitivity to the emission spectrum; and

means for filtering having a transmission spectrum that suppresses the wavelength of the emission spectrum that the means for intensifying is temperature sensitive;

the means for filtering suppressing the wavelength shorter than a principle peak of the emission spectrum of the means for intensifying; and

the means for filtering being disposed between the means for intensifying and the means for detecting.

60 (currently amended): A radiation dose measuring module comprising:

means for intensifying having ~~an~~ a light emission spectrum in response to incident radiation, the means for intensifying emitting a wavelength that is temperature dependent;

means for detecting that has a sensitivity to the emission; and

means for filtering having a transmission spectrum that suppresses the wavelength of the emission spectrum that the means for intensifying is temperature dependent;

the means for filtering suppressing the wavelength shorter than a principle peak of the emission spectrum of the means for intensifying;

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the means for filtering being disposed between the means for intensifying and the means for detecting; and

a frame supporting the means for intensifying, the means for detecting and the means for filtering,

the frame forming a guide for the radiation of the emission spectrum of the means for intensifying.